## ARTIFACT SHEET

artifact t	ype code (see list below) + sequential letter (A, B, C.). The first
artifact f	older for an artifact type receives the letter A, the second B, etc
Example	es: 59123456PA, 59123456PB, 59123456ZA, 59123456ZB
	09128831ZA
Indicate individu	quantity of a single type of artifact received but not scanned. Create al artifact folder/box and artifact number for each Artifact Type.
	CD(s) containing:
1 1 '	
	computer program listing  Doc Code: Computer  Artifact Type Code: P
	pages of specification
	and/or sequence listing
	and/or table
	Doc Code: Artifact Artifact Type Code: S
	content unspecified or combined
	Doc Code: Artifact Artifact Type Code: U
<u></u>	Stapled Set(s) Color Documents or B/W Photographs
	Doc Code: Artifact Artifact Type Code: C
	Microfilm(s)  Doc Code: Artifact Type Code: F
·	Video tape(s)  Doc Code: Artifact Type Code: V
	Model(s)  Doc Code: Artifact Type Code: M
	Bound Document(s)  Doc Code: Artifact Type Code: B
	Confidential Information Disclosure Statement or Other Documents marked Proprietary, Trade Secrets, Subject to Protective Order, Material Submitted under MPEP 724.02, etc.  Doc Code: Artifact Type Code X
	Other, description: US PHENT #5350/31-Original Doc Code: Artifact Artifact Type Code: Z
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# The United States of America



Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

# United States Patent

Grants to the person or persons having title to this patent the right to exclude others from making, using or selling the invention throughout the United States of America for the term of seventeen years from the date of this patent, subject to the payment of maintenance fees as provided by law.

Buce Tehran

Commissioner of Patents and Trademarks

Miscilla Afuller

Attes



#### US005350131

## United States Patent [19]

Baumgartner et al.

the

[11] Patent Number:

5,350,131

[45] Date of Patent:

Sep. 27, 1994

[54]	FISHING REELS WITH A SPOOL RECEIVING THE FISHING LINE				
[75]	Inventors:	Walter Baumgartner, Theilenhofen; Dieter Hamann, Gunzenhausen, both of Fed. Rep. of Germany			
[73]	Assignee:	D.A.M. Deutsche Angelgerate Manufaktur Hellmuth Kuntze GmbH & Co. KG, Fed. Rep. of Germany			
[21]	Appl. No.:	788,801			
[22]	Filed:	Nov. 7, 1991			
[30]	Foreig	n Application Priority Data			
Nov	. 10, 1990 [D	E] Fed. Rep. of Germany 4035846			
[52]	U.S. Cl				
[56]		References Cited			
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Primary Examiner—Katherine Matecki Attorney, Agent, or Firm—Bacon & Thomas

### 7] ABSTRACT

In a fishing reel of the type in which the spool for receiving the fishing line is caused to move to and fro in the direction of its winding axis in response to a cam drive for driving a spindle attached to the spool, the cam drive including a guide part with a guide slot into which projects an eccentrically mounted cam stud, the guide slot is in the form of an elongated S in order to impart an acceleration to the spool at its reversing points, and thereby prevent formation of bulges at the sides of the spool during winding. The locations in the guide slot corresponding to reversing points of the spool are offset from a center line of the guide slots along a longitudinal axis of the slot in a direction perpendicular to the stroke direction, resulting in the above-described acceleration and also having the effect of increasing displacement of the cam drive mechanism in the stroke direction.

6 Claims, 5 Drawing Sheets

